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By J. F. GATES CLARKE

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NEOTROPICAL MICROLEPIDOPTERA, XIV[1]

CHILEAN MICROLEPIDOPTERA DESCRIBED BY EMILIO BLANCHARD

By J. F. Gates Clarke
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Through the courtesy of Dr. Pierre Viette, Museum Nationale d'Histoire Naturelle, Paris, I have enjoyed the privilege of examining some of the types of Chilean Microlepidoptera described by Emilio Blanchard in 1852. The species recorded in this paper, the types of which I have examined, are *Epigraphia albella*, *Palpula variegella*, *Aecophora candidella*, *Elachista rubella*, *E. cupreella*, *E. aureella*, and *E. maculella*. Apparently the type of *Elachista obscurella* (the fifth species described in the latter genus) has been lost or destroyed.

All of the above were described as "Tineidas" and, as far as I am able to ascertain, no attempt has been made to assign these species to

[1] Prepared with the aid of a National Science Foundation Grant. Previous parts of this same series are: I and II, Clarke, 1962, Proc. U.S. Nat. Mus., vol. 113, no. 3457, pp. 373–388; III, Clarke, 1964, ibid., vol. 115, no. 3480, pp. 61–84; IV, Duckworth, 1964, ibid., vol. 116, no. 3497, pp. 97–114; V, Obraztsov, 1964, ibid., vol. 116, no. 3501, pp. 183–196; VI, Clarke, 1964, ibid., vol. 116, no. 3502, pp. 197–204; VII, Obraztsov, 1966, ibid., vol. 118, no. 3527, pp. 221–232; VIII, Duckworth, 1966, ibid., vol. 118, no. 3531, pp. 391–404; IX, Obraztsov, 1966, ibid., vol. 118, no. 3535, pp. 577–622; X, Duckworth, 1966, ibid., vol. 119, no. 3540, pp. 1–6; XI, Obraztsov, 1966, ibid., vol. 119, no. 3543, pp. 1–12; XII, Duckworth, 1967, ibid., vol. 122, no. 3585, pp. 1–38; XIII, Duckworth, 1967, ibid., vol. 122, no. 3590, pp. 1–8.

appropriate families and genera; indeed, no references to these have been made by modern workers including Meyrick, who apparently never recognized any of the species.

For the most part the types are not in sufficiently good condition to encourage photography; they are either covered with mold or are glued to small pieces of celluloid. The pattern on some of them is clearly visible, but on the others it is obscured. By cleaning a forewing it was possible to make a fairly accurate drawing of the pattern of *Epigraphia albella*—certainly an adequate procedure for identification when taken together with the figure of the genitalia.

Oecophoridae

Epigraphia albella Blanchard

FIGURE 1

Epigraphia albella Blanchard, 1852, *in* Gay, Historia fisica and politica de Chile, Zoologia, vol. 7, p. 107.

This species is clearly oecophorid but is improperly placed in *Epigraphia*. The type is covered with mold, but the following characters are visible: Antenna ciliate. Labial palpus recurved, second and third segments of about equal length. Forewing with 12 veins; 2 remote from 3; 3, 4, and 5 about equidistant; 7 and 8 stalked,

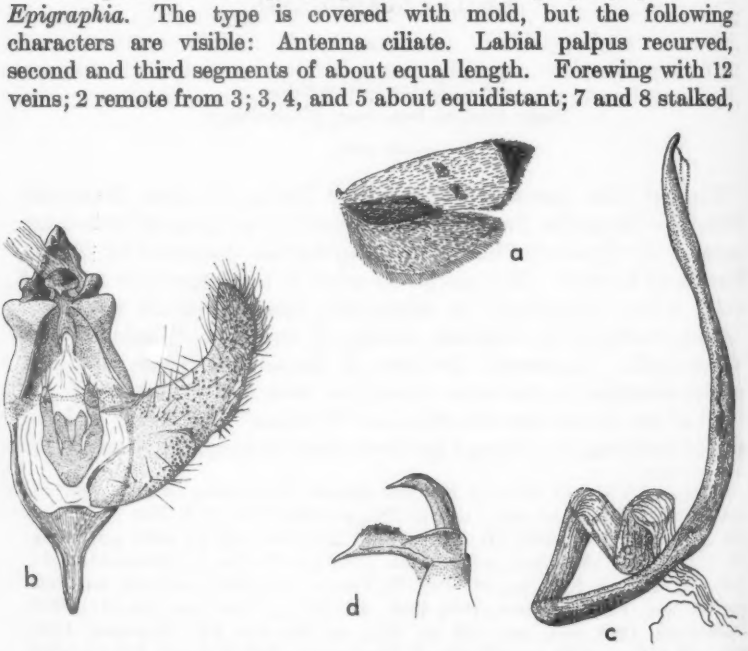

FIGURE 1.—*Epigraphia albella* Blanchard: *a*, right wings showing pattern; *b*, ventral view of male genitalia with left harpe and aedeagus removed; *c*, aedeagus; *d*, lateral aspect of uncus and gnathos.

7 to termen just below apex. Hindwing with 8 veins; 2 remote from 3; 3 and 4 connate; 4, 5, and 6 about equidistant, well separated. Abdomen spined.

Male genitalia figured from slide JFGC no. 11257.

The proper generic placement of this species must await exhaustive studies in southern hemisphere Oecophoridae.

Hyponomeutidae

Eucalliathla, new genus

Type-species: *Aecophora candidella* Blanchard, 1852 *in* Gay, Historia fisica y politica de Chile, Zoologica, vol. 7, p. 109.

Head smooth except posteriorly; face smooth; ocelli absent; tongue well developed; maxillary palpus obsolete. Antenna with pecten on scape. Labial palpus long, slender; second segment with slightly rough scaling beneath; third segment slightly longer than second, acute. Posterior tibia smooth-scaled. Forewing with 12 veins, all veins separate; stigma present; 2 from angle of cell; 2 to 10 approximate; 11 from slightly before middle of cell; accessory cell present. Hindwing with 8 veins; 3 and 4 connate; 5 and 6 long stalked; 6 and 7 nearly parallel. Female genitalia with signum. Male unknown.

This genus is closely allied to *Calliathla* Meyrick but differs from it by the absence of ocelli, smooth head and face, the close proximity of veins 2, 3, and 4 of forewing and the connate condition of veins 3 and 4 of hindwing. In addition, the third segment of labial palpus is longer than the second in *Eucalliathla* but shorter than second in *Calliathla*.

In describing *Calliathla*, Meyrick stated: "Hindwings . . . 5 to 7 nearly parallel." This is not the case; 5 and 6 are stalked, and 6, 7, and 8 are nearly parallel.

Eucalliathla candidella (Blanchard), new combination

FIGURE 2

Aecophora candidella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologica, vol. 7, p. 109.

The type of this small species, in very good condition, is glued by the left side to a piece of celluloid. I removed one pair of wings and the abdomen to make the necessary preparations so the species could be placed properly. The remaining wings are in excellent condition with the upper surfaces exposed. Both wings are shiny white, the forewing with a slight tinge of ocherous.

Female genitalia and wing venation figured from slide JFGC no. 11263.

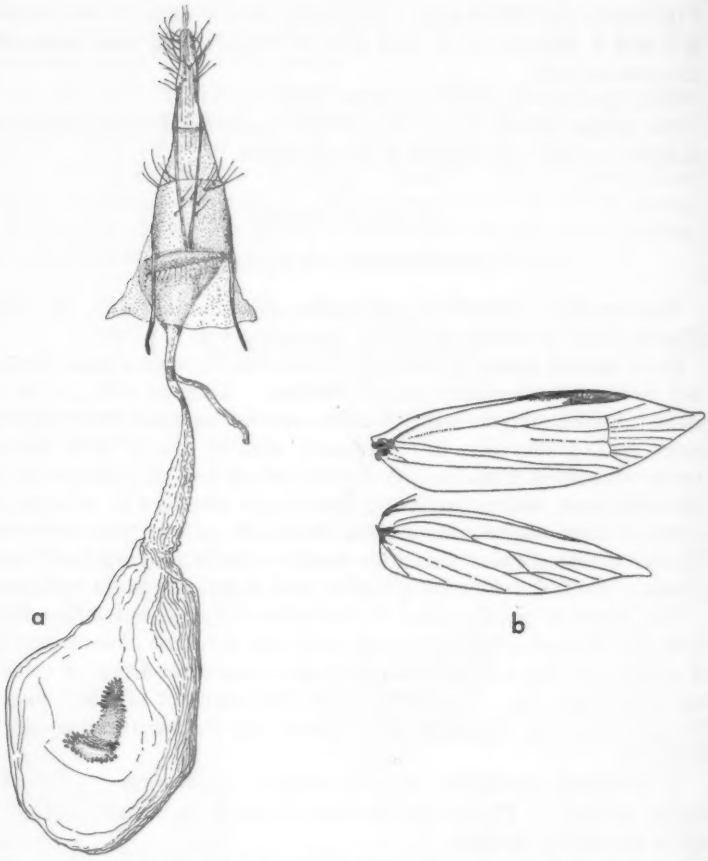

FIGURE 2.—*Eucalliathla candidella* (Blanchard): *a*, ventral view of female genitalia; *b*, venation of right wings.

Acrolepia aureella (Blanchard), new combination

FIGURE 3

Elachista aureella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologica, vol. 7, p. 110.

I have before me 13 ♂♂ and 17 ♀♀ (Chile, Llanquihue, Peulla, 7–9.III.1959, JFGClarke) which I have been able to identify as this species. The type, labeled "Chile, Valdivia," although unspread and glued to a piece of celluloid, is in reasonably good condition, and the female genitalia are identical to those of females of my series.

Female genitalia figured from the type, slide JFGC no. 11367.

FIGURE 3.—*Acrolepia aureella* (Blanchard): ventral view of female genitalia with bursa copulatrix on right.

***Acrolepia maculella* (Blanchard), new combination**

Elachista maculella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologica, vol. 7, p. 111.

The type, from San Carlos, lacks its abdomen but the species is clearly a hyponomeutid belonging to *Acrolepia*. Actually, *maculella* resembles *aureella* but there are sufficient points of distinction to separate the two. A complete, narrow, transverse, white fascia, at about apical third of forewing, is the most conspicuous feature separating *maculella* from *aureella*.

Elachistidae

***Elachista cupreella* Blanchard**

FIGURE 4*b*

Elachista cupreella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologica, vol. 7, p. 110.

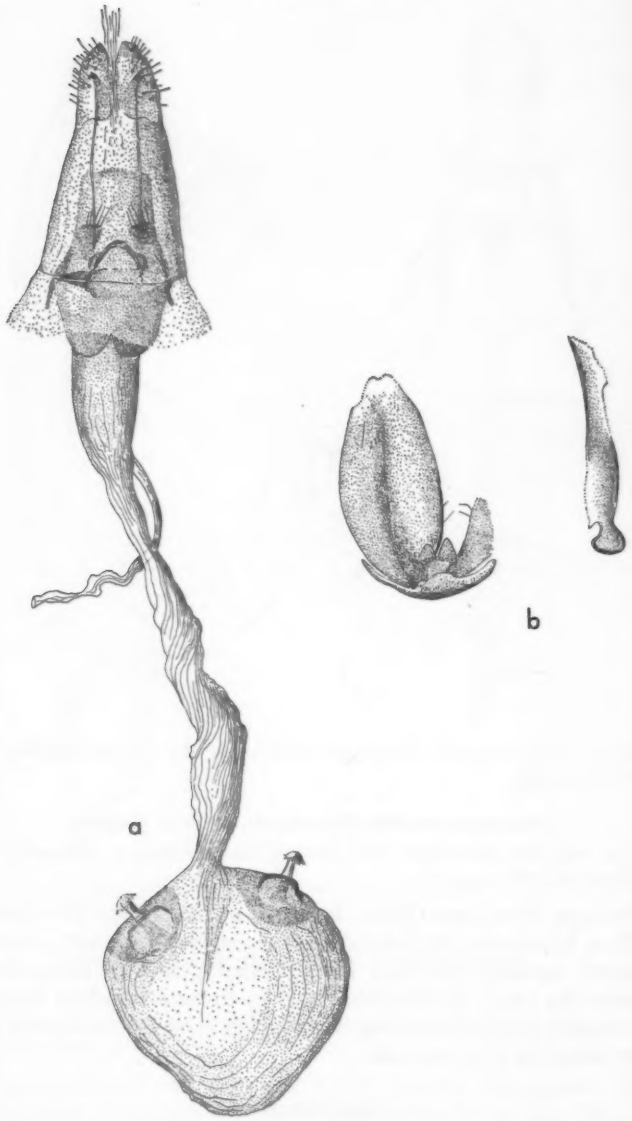

FIGURE 4.—*Elachista rubella* Blanchard: *a*, ventral view of female genitalia. *Elachista cupreella* Blanchard: *b*, ventral view of male genitalia (fragmentary) with aedeagus to right.

The posterior portion of the abdomen of the type has been damaged by pests, and an insufficient part of the genitalia remains to permit accurate placement of this species. Most of the vinculum, one harpe, part of the aedeagus and the anellus are preserved. The anellus is comparable to that of other species of *Elachista*, and the habitus and pattern of this brilliant little moth recommend its retention in this genus. The type is labeled "Carelmapu."

The male genitalia (partial) are figured from the type slide, JFGC no. 11368.

***Elachista rubella* Blanchard**

FIGURE 4*a*

Elachista rubella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologia, vol. 7, p. 110.

This colorful little species has the fascies of a heliodinid, but the female genitalia rule out placement in that family as we know it. The two peculiar signa are reminiscent of some species of *Phyllocnistis*, but otherwise, *rubella* has no characters in common with species of that genus. The type is labeled "Chile" and recorded from Valdivia.

Female genitalia figured from the type, slide JFGC no. 11369.

Tineidae

***Lindera tessellatella* Blanchard**

FIGURE 5

Lindera tessellatella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologia, vol. 7, p. 106.

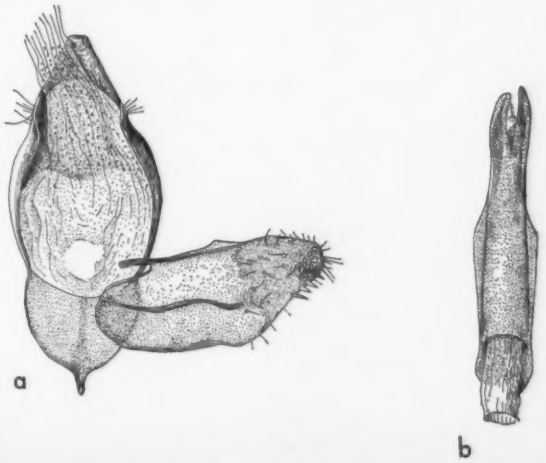

FIGURE 5.—*Lindera tessellatella* Blanchard: *a* (type of *Palpula variegella* Blanchard), ventral view of male genitalia with left harpe and aedeagus removed; *b*, aedeagus.

Palpula variegella Blanchard, 1852, *in* Gay, Historia fisica y politica de Chile, Zoologia, vol. 7, p. 108. [New synonymy.]

Although *tessellatella* has long been recognized, *variegella* has never been associated with it. The type of *variegella* is badly covered with mold and is superficially unrecognizable, but it was possible to obtain an adequate preparation of the genitalia to insure identification. The specimen is a male, and there is no doubt about the synonymy.

Male genitalia figured from slide JFGC no. 11262.

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